



*Virginia Information Technologies Agency*



# Data Standardization & Governance

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## Agenda

- Data Standardization
- Commonwealth Data Strategy
- Data Governance
- Panel Discussion



## COV Data Standards Initiative

- In 2008, Budget Bill required central agencies to define their data standards
  - DOA, DPB, DGS, DHRM, and TRS
  - In support of the new financial management system (VDOT and DOA effort)
- In 2009, Senate Bill 936 required data transparency and data standards for vendor and procurement data
  - DOA, DGS, and VITA accountable agencies



## Definitions

- **What is a Data Standard?**

- A data standard defines information about data
  - For example - definition, data type, authoritative source, stewardship, etc.
    - Some data are defined by a distinct list of valid values (e.g. gender code, state code)
    - Some data are defined as an Identifier – critical to defining uniqueness across a domain (e.g. employee identifier)
  - Data standards are defined within a context or domain



## Definitions

### What is a Data Exchange Standard?

- A data exchange standard is the method used for exchanging data with others
  - Some exchange formats are required by other parties (e.g. American Association of Motor Vehicle Administrators – AAMVA)
  - Some exchange formats are within our control (e.g. agency to agency, agency to locality)
- Leverage web services technology for all new data exchanges/interfaces
  - Critical to define the authoritative source for the data
  - Critical to define the business rules for managing the data (create, read, update, delete) as it moves across the enterprise



## More Definitions

- **What are National and Industry Data Standards?**

- Data and data exchange standards defined by national organizations and industry consortiums to improve the ability to share data.
  - Environment (e.g. Environmental Information Exchange Network)
  - Health (e.g. HL7)
  - Human Resources (e.g. HR-XML)
  - Financial Reporting (e.g. XBRL)
- Provide public and private organizations with a common data definition, data exchange schema, and solutions to leverage.



## Where are we?

- **COV Internal Data Standards – Goals**
  - Procurement Vendor Data Standard (2009)
  - Order to Pay Data Standard (2009)
  - Chart of Account Data Standard (early 2010)
  - Employee and Timecard Data Standard (TBD)
  - Working with DMV to identify opportunities to define standard data exchanges as part of the CSI Project (early 2010)
- **External Data Standards – Goals**
  - Health IT Standards (2009)







# Commonwealth Data Strategy

## Vision

Enterprise data and information is managed as a Commonwealth asset to provide value to our citizens and stakeholders.



**Enterprise data** is data that is collected by two or more state agencies or data shared between states or other entities.

Examples of enterprise data – Employee, Citizen, Expenditure and Vendor

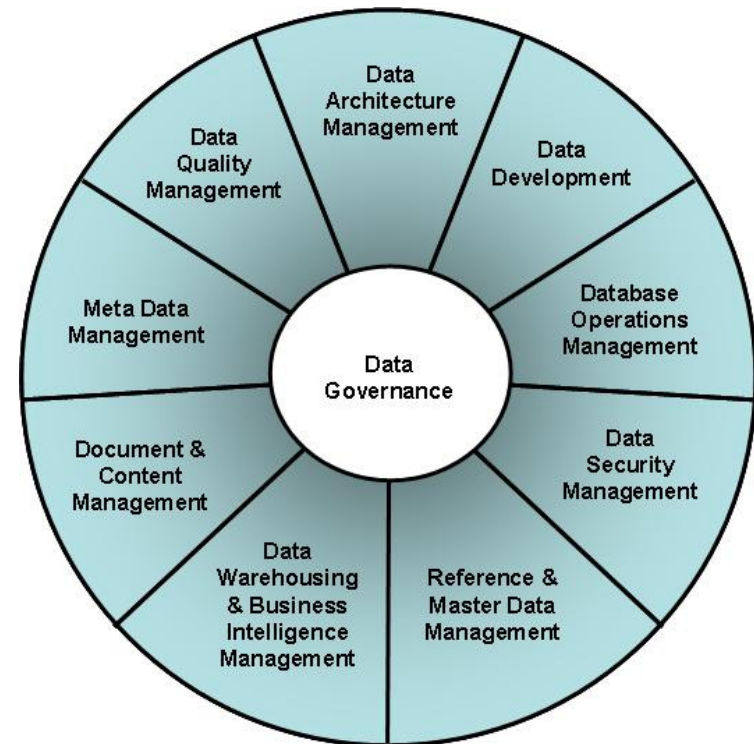




# Strategic Goals

## Goals

- Establish a enterprise data management program
- Enable data sharing
- Establish data governance and oversight



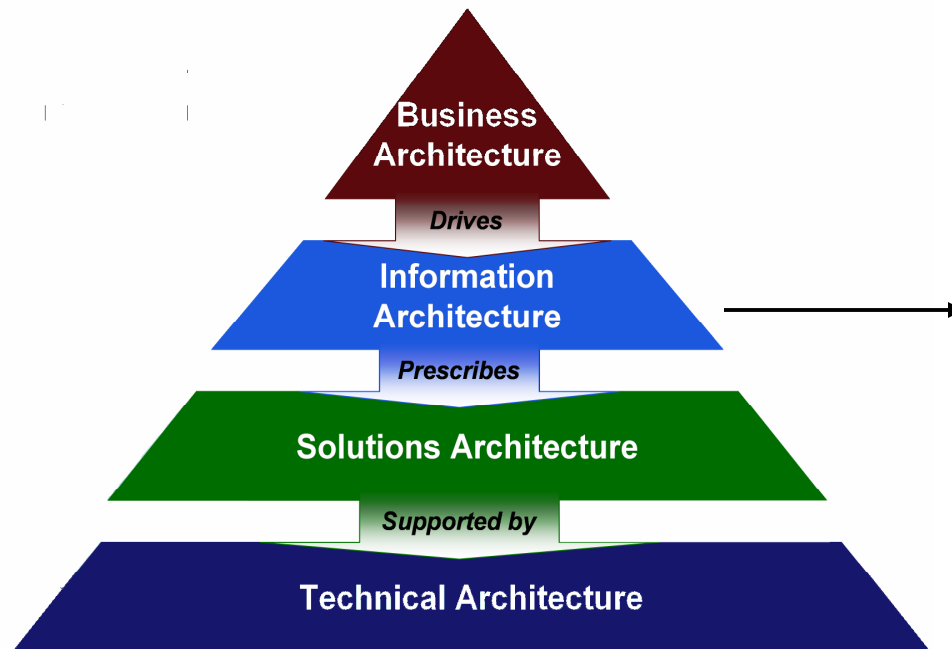
**Data Management Functions**

The Data Management Association International – DAMA – [www.dama.org](http://www.dama.org)

The Data Management Body of Knowledge (DMBOK) <http://www.dama.org/i4a/pages/index.cfm?pageid=3364>



## IA part of EA (Enterprise Architecture)



### Data Management Functions

Data Governance and Policy		
Data Quality	Data Architecture	Data Security
Database Operations	Master Data Mgmt	Reference Data Mgmt
Data Development	BI & Data Warehousing	ECM
Metadata Management		

Our data management practices are immature and require significant attention to mature to a defined, managed and optimized practice.



## Data Governance

Data governance is a system of *decision rights* and *accountabilities* for information-related processes, executed according to *agreed-upon models* which describe *who* can take *what* actions with *what* information, and *when*, under *what circumstances*, using *what methods*.

*The Data Governance Institute*

Refers to the overall management of the availability, usability, integrity and security of the data employed in an enterprise.



## Data Governance

- A strong data governance program will include
  - a central body or council to create governance rules,
  - a set of procedures and
  - a plan to follow through those procedures
- It differs from data management in that data management is a tactical execution of the policies created by the data governance body



# Objectives of Data Governance

- Address and synchronize data collection processes
- Reduce data redundancy
- Systematically improve
  - *Data Accessibility*
  - *Data Flexibility*
  - *Data Availability*
  - *Data Reuse*





## Barriers to Achieving Governance

- ⇒ ***Institutional*** - rules, authorities, policies
- ⇒ ***Organizational*** – culture of not sharing, information segregation and hoarding
- ⇒ ***Technological*** – incompatible programs, networks, systems and data
- ⇒ ***Resistance to change*** – maintain the status quo, protect the base



## Panel Discussion Topics

- ***Data Management***
- ***Data Standardization***
- ***Data Governance***
- Questions





## To Learn More

- Visit us on the VITA website under Technology Oversight, Enterprise Architecture  
<http://www.vita.virginia.gov/oversight/default.aspx?id=10338>
- Contact Nadine Hoffman at  
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